To: Zell, Christopher[zell.christopher@epa.gov]; akol461@ecy.wa.gov[akol461@ecy.wa.gov];

Cope, Ben[Cope.Ben@epa.gov]; Bilhimer, Dustin (ECY)[DBIL461@ECY.WA.GOV]

From: Weiss, Leanne (ECY)

Sent: Tue 12/13/2016 11:55:05 PM

Subject: RE: Budd Inlet TMDL: Discuss DO water quality standards

Location: Ecology Room 1D-10.
EPA phone-in info: Ex. 6 - Personal Privacy Access Code Ex. 6 - Personal Privacy

Agenda Items:

- 1. Follow up regarding last meeting and bubble allocation.
- 2. Other ideas/strategies for working through external sources.
- 3. Review of other items from last meeting (see email from Andrew copied below).
- 4. Future agenda items and points of discussion.

From: Kolosseus, Andrew (ECY) [mailto:AKOL461@ECY.WA.GOV]

Sent: Tuesday, December 06, 2016 8:11 AM

To: Zell, Christopher <zell.christopher@epa.gov>; Weiss, Leanne (ECY) <lewe461@ECY.WA.GOV>

Subject: Budd Inlet

Chris and Leanne:

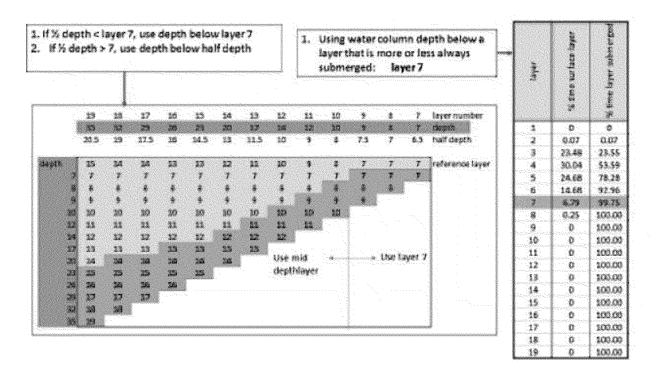
I made a couple of notes from last week's EPA-Ecology meeting on Budd Inlet / South Puget Sound. I wanted to make sure I heard correctly and that we remember where we ended up. Can you both take a look at this and let me know if this is correct?

- 1. EPA agreed that a phased TMDL that set an aggregated allocation at the boundary of Budd Inlet (even though we won't be able to tie it to individual WLA at the end of the pipe for WWTPs) was an acceptable use of the Phased TMDL option. We would need to be open about uncertainty and include schedules for everything, including a Puget Sound TMDL. (Note that Ecology would still need to get internal approval before using this approach).
- 2. EPA understands that there is not a "high" likelihood of solving the capitol lake problem (although there is a good opportunity) and there is no way to meet water quality standards without solving capitol lake problem. If this is the only shortcoming in a future Budd Inlet TMDL, EPA would be able to approve the TMDL.

ED_001270_00012156 EPA_001769

3. We will have future conversations about (a) downstream standards and (b) aesthetic and other non-aquatic life uses.

And there was a brief mention of vertical averaging on the Puget Sound DO project. We're already doing this in Budd Inlet. Chris, please take a look at our approach – attached as a slide, below (let me know if it doesn't come through). Let us know asap if you have an issues with this approach. The basic idea is that model layer 7 has water in is 99.75% of the time (i.e. layer 7 is subtidal). Therefore, in areas of the model with 7, 8, or 9 layers we average layers 7 through 9. In deeper waters, we used the mid depth layers. It's the layers in the darker gray in the plot that we averaged. This approach was used for the slides from the November advisory committee meeting update that I sent to you earlier. If you have concerns or questions, we should add this to the future conversations in #3.



Andrew Kolosseus Washington State Dept. of Ecology PO Box 47775 Olympia, WA 98504-7775 (360) 407-7543

----Original Appointment----

From: Zell, Christopher [mailto:zell.christopher@epa.gov]

ED_001270_00012156 EPA_001770

Sent: Tuesday, December 13, 2016 3:21 PM

To: Weiss, Leanne (ECY); Kolosseus, Andrew (ECY); Cope, Ben **Subject:** Budd Inlet TMDL: Discuss DO water quality standards

When: Wednesday, December 14, 2016 3:30 PM-4:30 PM (UTC-08:00) Pacific Time (US & Canada).

Where: Chris and Ben to call Leane and Andrew at Ex. 6 - Personal Privacy

ED_001270_00012156 EPA_001771